REMARKS

This paper is responsive to the Office Action dated June 2, 2006.

Claims 119 and 127-131 were pending in this application. Claims 119 and 129 have been examined and stand variously rejected. Upon entry of this amendment, certain claims are amended and claim 128 is cancelled. Accordingly, the pending claims are 119, 127, and 129-131.

Applicants acknowledge with gratitude withdrawal of rejections previously made under 35 USC § 102(e) with respect to U.S. Patent 6,093,809. Further consideration and allowance of the application is respectfully requested.

Interview summary

The undersigned wishes to thank Examiner Myers for the helpful telephone interview conducted on July 6, 2006. The claim wording presented in this Amendment was discussed, along with ways of overcoming the current rejections in the case.

The application is now believed to be in condition for allowance, which is respectfully requested.

Restriction requirement and request for rejoinder

The Office Action states that claims 128 and 130 as previously presented were drawn to subject matter outside the invention elected for examination. Applicants agree. Claim 128 has now been cancelled, and claim 130 has been rewritten as a polynucleotide claim, depending from another polynucleotide claim in the elected group.

Applicants hereby renew their request that claims 127 and 131 be rejoined into the group under examination upon determination that the product claims from which they depend are patentable.

Rejection under 35 USC § 112 ¶ 2

Claim 119 and 129 stand rejected as indefinite for reasons of claim wording. The claims have now been amended in accordance with the Examiner's recommendation, for which applicants are grateful.

Rejections under 35 USC § 112 ¶ 1

Claim 119 stands rejected under the written description and enablement requirements of § 112 ¶ 1, for reasons related to the *proviso* clause as previously presented.

The claim has now been amended to state that the claimed polynucleotide does not contain consecutive nucleotides 1-2009 of SEQ. ID NO:124. Reference to this portion of SEQ. ID NO:124 as part of the mouse telomerase reverse transcriptase cDNA sequence may be found in the specification on page 165, lines 3-10.

Withdrawal of the rejections under 35 USC § 112 ¶ 1 is respectfully requested.

Applicants submit that the claim as presently worded is again not subject to obviousness-type double patenting with respect to U.S. Patent 6,767,719, which claims polynucleotides encoding mouse telomerase reverse transcriptase, and functional homologs thereof. Appendix A compares SEQ. ID NO:124 of this application with the cDNA and encoded protein sequence from the '719 patent. SEQ. ID NO:124 encodes 658 amino acids (i.e., over half) of the native mTRT protein.

Double patenting

Claims 119 and 129 of this application stand rejected for obviousness-type double patenting over certain claims of U.S. Patents 6,927,285; 6,921,664; 6,337,200; 6,475,789; and 6,444,650. These claims are also provisionally rejected for obviousness type double patenting over certain claims of copending applications USSN 09/721,477; USSN 10/877,124; USSN 10/044,539; USSN 09/721,506; USSN 11/207,078; and USSN 10/044,692.

Applicants respectfully submit that nothing needs to be done with respect to USSN 09/721,477; USSN 11/207,078, and USSN 10/044,692, because they are less advanced in prosecution and not expected to issue first. The other patents and applications will be addressed under separate cover.

Rejection under 35 USC § 102(e):

The claims under examination stand rejected under § 102(e) as being anticipated by what is disclosed in U.S. Patent 6,309,867, which names different inventors from the inventors named in the present application.

Enclosed with this Amendment is a second Declaration under 37 CFR § 1.132 by Calvin Harley. He explains that the *Schizosaccharomyces pombe* sequence was deduced by Thomas Cech and Toru Nakamura. Only the *pombe* protein sequence is claimed in the '867 patent, and so the patent appropriately names Cech and Nakamura as the inventive entity. However, the human TERT sequence and use thereof disclosed but not claimed in the '867 patent was deduced by the same inventors as are named on the present application.

Thus, the relevant information disclosed in the cited patent does not qualify as an invention by "another" under 35 USC § 102(e). Withdrawal of this rejection is respectfully requested.

Request for further interview

Applicants respectfully request that all outstanding rejections be reconsidered and withdrawn. Once the double patenting issues are addressed, the application should be in condition for allowance, and a prompt Notice of Allowance is requested.

In the event that the Examiner determines that there are other matters to be addressed, applicants hereby request an interview by telephone.

PATENT
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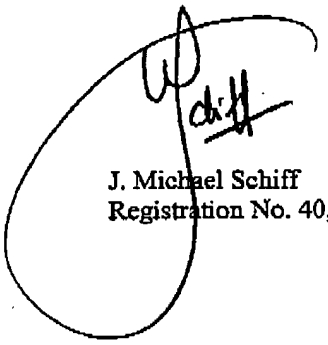
015389-002950US
018/206p2

Fees due

No fee is believed payable with respect to entry and consideration of this response. However, should the Patent Office determine that a further extension of time or any other relief is required for further consideration of this application, applicants hereby petition for such relief, and authorize the Commissioner to charge the cost of such petitions and other fees due in connection with the filing of these papers to Deposit Account No. 07-1139, referencing the docket number indicated above.

Respectfully submitted,



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Appendix A

SEQ. ID NO.124 of the current application

CGGGTGGGAG GCCCATCCCG GCCTTGAGCA CAATGACCCG CGCTCCTCGT TGCCCCGCGG TGCGCTCTCT GCTGCGCAGC
CGATACCGGG AGGTGTGGCC GCTGGCAACC TTTGTGCGGC GCCTGGGGCC CGAGGGCAGG CGGCTTGTGC AACCCGGGGA
CCCGAAGATC TACCGCACTT TGGTTGCCCA ATGCCTAGTG TGCATGCACT GGGGCTCACA GCCTCCACCT GCCGACCTTT
CCTTCCACCA GGTGTCATCC CTGAAAGAGC TGGTGGCCAG GGTTGTGCAG AGACTCTGCG AGCGCAACGA GAGAAACGTG
CTGGCTTTTG GCTTTGAGCT GCTTAACGAG GCCAGAGGCG GGCCTCCCAT GGCCTTCACT AGTAGCGTGC GTAGCTACTT
GCCCAACACT GTTATTGAGA CCCTGCGTGT CAGTGGTGCA TGGATGCTAC TGTTGAGCCG AGTGGGCGAC GACCTGCTGG
TCTACCTGCT GGCACACTGT GCTCTTTATC TTCTGGTGCC CCCCAGCTGT GCCTACCAGG TGTGTGGGTC TCCCCTGTAC
CAAATTTGTG CCACCACGGA TATCTGGCCC TCTGTGTCCG CTAGTTACAG GCCCACCCGA CCCGTGGGCA GGAATTTCAC
TAACCTTAGG TTCTTACAAC AGATCAAGAG CAGTAGTCGC CAGGAAGCAC CGAAACCCCT GGCCTTGCCA TCTCGAGGTA
CAAAGAGGCA TCTGAGTCTC ACCAGTACAA GTGTGCCTTC AGCTAAGAAG GCCAGATGCT ATCCTGTCCC GAGAGTGGAG
GAGGGACCCC ACAGGCAGGT GCTACCAACC CCATCAGGCA AATCATGGGT GCCAAGTCCT GCTCGGTCCC CCGAGGTGCC
TACTGCAGAG AAAGATTTGT CTTCTAAAGG AAAGGTGTCT GACCTGAGTC TCTCTGGGTC GGTGTGCTGT AAACACAAGC
CCAGCTCCAC ATCTCTGCTG TCACCACCCC GCCAAAATGC CTTTCAGCTC AGGCCATTTA TTGAGACCAG ACATTTCCTT
TACTCCAGGG GAGATGGCCA AGAGCGTCTA AACCCCTCAT TCCTACTCAG CAACCTCCAG CCTAACTTGA CTGGGGCCAG
GAGACTGGTG GAGATCATCT TTCTGGGCTC AAGGCCTAGG ACATCAGGAC CACTCTGCAG GACACACCGT CTATCGCGTC
GATACTGGCA GATGCGGCCC CTGTTCCAAC AGCTGCTGGT GAACCATGCA GAGTGCCAAT ATGTCAGACT CCTCAGGTCA
CATTGCAGGT TTCGAACAGC AAACCAACAG GTCACAGATG CCTTGAACAC CAGCCCACCG CACCTCATGG ATTTGCTCCG
CCTGCACAGC AGTCCCTGGC AGGTATATGG TTTTCTTCGG GCCTGTCTCT GCAAGGTGGT GTCTGCTAGT CTCTGGGGTA
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GCACCGTCTG AGGGAGAGGA TCCTGGCTAC GTTCCTGTTC TGGCTGATGG ACACATACGT GGTACAGCTG CTTAGGTCAT
TCTTTTACAT CACAGAGAGC ACATTCCAGA AGAACAGGCT CTTCTTCTAC CGTAAGAGTG TGTGGAGCAA GCTGCAGAGC
ATTGGAGTCA GGCAACACCT TGAGAGAGTG CGGCTACGGG AGCTGTCACA AGAGGAGGTC AGGCATCACC AGGACACCTG
GCTAGCCATG CCCATCTGCA GACTGCGCTT CATCCCCAAG CCCAACGGCC TGCGGCCCAT TGTGAACATG AGTTATAGCA
TGGGTACCAG AGCTTTGGGC AGAAGGAAGC AGGCCCAGCA TTTCACCCAG CGTCTCAAGA CTCTCTTCAG CATGCTCAAC
TATGAGCCG

mTERT cDNA sequence (SEQ. ID NO.1) from U.S. Patent 6,767,719

GAATTCCGGGTGGGAGGCCCATCCCGGCCTTGAGCACAATGACCCGCGCTCCTCGTTGCCCCGCGGTGCGCTCTCTGCTGCGCAGCCGATACCG
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GTTGCCCAATGCCTAGTGTGCATGCACTGGGGCTCACAGCCTCCACCTGCCGACCTTTCCTTCCACCAGGTGTCATCCCTGAAAGAGCTGGTGG
CCAGGGTTGTGCAGAGACTCTGCGAGCGCAACGAGAGAAACGTGCTGGCTTTTGGCTTTGAGCTGCTTAACGAGGCCAGAGGCGGGCCTCCCAT
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ACCAAATTTGTGCCACCACGGATATCTGGCCCTCTGTGTCCGCTAGTTACAGCCCCACCCGACCGTGGGCAGGAATTTCACTAACCTTAGGTT
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ACAAGTGTGCCTTCAGCTAAGAAGGCCAGATGCTATCCTGTCCCGAGAGTGGAGGAGGGACCCCACAGGCAGGTGCTACCAACCCCATCAGGCA
AATCATGGGTGCCAAGTCCTGCTCGGTCCCCCGAGGTGCCTACTGCAGAGAAAGATTTGTCTTCTAAAGGAAAGGTGTCTGACCTGAGTCTCTC
TGGGTCGGTGTGCTGTAAACACAAGCCCAGCTCCACATCTCTGCTGTCACCACCCCGCCAAAATGCCTTTCAGCTCAGGCCATTTATTGAGACC
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CTCCTTTCCTCCTGAAGCCGCACATTGGCTCTGCTACCAGGCCTTCCTGCTCAAGCTGGCTGCTCATTCTGTCATCTACAAATGTCTCCTGGGA
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GAGCTCGGTACCAAGCTT

mTERT protein sequence (SEQ. ID NO.2) from U.S. Patent 6,767,719

MTRAPRCPAVRSLLRSRYREVWPLATFVRRLGPEGRRLVQPGDPKIYRTLVAQCLVCMHWGSQPPPADLSFHQVSSLKELVARVVQRLCERNER
NVLAFGFELLNEARGGPPMAFTSSVRSYLPNTVIETLRVSGAWMLLLSRVGDDLLVYLLAHCALYLLVPPSCAYQVCGSPLYQICATTDIWPSV
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BLAST comparison of nucleic acid sequence

BLASTX algorithm, NCBI website

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SEQ. ID NO.124:  1    CGGGTGGGAGGCCCATCCCGGCCTTGAGCACAATGACCCCGCGCTCCTCGTTGCCCCGCGG  60
                      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
mTRT:             7   CGGGTGGGAGGCCCATCCCGGCCTTGAGCACAATGACCCCGCGCTCCTCGTTGCCCCGCGG  66

SEQ. ID NO.124:  61   TGCGCTCTCTGCTGCGCAGCCGATACCGGGAGGTGTGGCCGCTGGCAACCTTTGTGCGGC  120
                      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
mTRT:             67  TGCGCTCTCTGCTGCGCAGCCGATACCGGGAGGTGTGGCCGCTGGCAACCTTTGTGCGGC  126

SEQ. ID NO.124:  121  GCCTGGGGCCCGAGGGCAGGCGGCTTGTGCAACCCGGGGACCCGAAGATCTACCGCACTT  180
                      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
mTRT:             127 GCCTGGGGCCCGAGGGCAGGCGGCTTGTGCAACCCGGGGACCCGAAGATCTACCGCACTT  186

SEQ. ID NO.124:  181  TGGTTGCCCAATGCCTAGTGTGCATGCACTGGGGCTCACAGCCTCCACCTGCCGACCTTT  240
                      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
mTRT:             187 TGGTTGCCCAATGCCTAGTGTGCATGCACTGGGGCTCACAGCCTCCACCTGCCGACCTTT  246

SEQ. ID NO.124:  241  CCTTCCACCAGGTGTCATCCCTGAAAGAGCTGGTGGCCAGGGTTGTGCAGAGACTCTGCG  300
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mTRT:             247 CCTTCCACCAGGTGTCATCCCTGAAAGAGCTGGTGGCCAGGGTTGTGCAGAGACTCTGCG  306

SEQ. ID NO.124:  301  AGCGCAACGAGAGAAACGTGCTGGCTTTTGGCTTTGAGCTGCTTAACGAGGCCAGAGGCG  360
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SEQ. ID NO.124:  361  GGCCTCCCATGGCCTTCACTAGTAGCGTGCGTAGCTACTTGCCCAACACTGTTATTGAGA  420
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mTRT:             367 GGCCTCCCATGGCCTTCACTAGTAGCGTGCGTAGCTACTTGCCCAACACTGTTATTGAGA  426

SEQ. ID NO.124:  421  CCCTGCGTGTCAGTGGTGCATGGATGCTACTGTTGAGCCGAGTGGGCGACGACCTGCTGG  480
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mTRT:             427 CCCTGCGTGTCAGTGGTGCATGGATGCTACTGTTGAGCCGAGTGGGCGACGACCTGCTGG  486

SEQ. ID NO.124:  481  TCTACCTGCTGGCACACTGTGCTCTTTATCTTCTGGTGCCCCCCAGCTGTGCCTACCAGG  540
                      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
mTRT:             487 TCTACCTGCTGGCACACTGTGCTCTTTATCTTCTGGTGCCCCCCAGCTGTGCCTACCAGG  546

SEQ. ID NO.124:  541  TGTGTGGGTCTCCCCTGTACCAAATTTGTGCCACCACGGATATCTGGCCCTCTGTGTCCG  600
                      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
mTRT:             547 TGTGTGGGTCTCCCCTGTACCAAATTTGTGCCACCACGGATATCTGGCCCTCTGTGTCCG  606

SEQ. ID NO.124:  601  CTAGTTACAGGCCCACCCGACCCCGTGGGCAGGAATTTCACTAACCTTAGGTTCTTACAAC  660
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mTRT:             607 CTAGTTACAGGCCCACCCGACCCGTGGGCAGGAATTTCACTAACCTTAGGTTCTTACAAC  666

SEQ. ID NO.124:  661  AGATCAAGAGCAGTAGTCGCCAGGAAGCACCGAAACCCCTGGCCTTGCCATCTCGAGGTA  720
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mTRT:             667 AGATCAAGAGCAGTAGTCGCCAGGAAGCACCGAAACCCCTGGCCTTGCCATCTCGAGGTA  726

SEQ. ID NO.124:  721  CAAAGAGGCATCTGAGTCTCACCAGTACAAGTGTGCCTTCAGCTAAGAAGGCCAGATGCT  780
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mTRT:             727 CAAAGAGGCATCTGAGTCTCACCAGTACAAGTGTGCCTTCAGCTAAGAAGGCCAGATGCT  786

SEQ. ID NO.124:  781  ATCCTGTCCCGAGAGTGGAGGAGGGACCCCACAGGCAGGTGCTACCAACCCCATCAGGCA  840
                      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
mTRT:             787 ATCCTGTCCCGAGAGTGGAGGAGGGACCCCACAGGCAGGTGCTACCAACCCCATCAGGCA  846
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SEQ. ID NO.124:  841  AATCATGGGTGCCAAGTCCTGCTCGGTCCCCCGAGGTGCCTACTGCAGAGAAAGATTTGT  900
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mTRT:            847  AATCATGGGTGCCAAGTCCTGCTCGGTCCCCCGAGGTGCCTACTGCAGAGAAAGATTTGT  906

SEQ. ID NO.124:  901  CTTCTAAAGGAAAGGTGTCTGACCTGAGTCTCTCTGGGTCGGTGTGCTGTAAACACAAGC  960
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mTRT:            907  CTTCTAAAGGAAAGGTGTCTGACCTGAGTCTCTCTGGGTCGGTGTGCTGTAAACACAAGC  966

SEQ. ID NO.124:  961  CCAGCTCCACATCTCTGCTGTCACCACCCCGCCAAAATGCCTTTCAGCTCAGGCCATTTA  1020
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mTRT:            967  CCAGCTCCACATCTCTGCTGTCACCACCCCGCCAAAATGCCTTTCAGCTCAGGCCATTTA  1026

SEQ. ID NO.124:  1021 TTGAGACCAGACATTTCCTTTACTCCAGGGGAGATGGCCAAGAGCGTCTAAACCCCTCAT  1080
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mTERT            1027 TTGAGACCAGACATTTCCTTTACTCCAGGGGAGATGGCCAAGAGCGTCTAAACCCCTCAT  1086

SEQ. ID NO.124:  1081 TCCTACTCAGCAACCTCCAGCCTAACTTGACTGGGGCCAGGAGACTGGTGGAGATCATCT  1140
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mTERT            1087 TCCTACTCAGCAACCTCCAGCCTAACTTGACTGGGGCCAGGAGACTGGTGGAGATCATCT  1146

SEQ. ID NO.124:  1141 TTCTGGGCTCAAGGCCTAGGACATCAGGACCACTCTGCAGGACACACCGTCTATCGCGTC  1200
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mTERT            1147 TTCTGGGCTCAAGGCCTAGGACATCAGGACCACTCTGCAGGACACACCGTCTATCGCGTC  1206

SEQ. ID NO.124:  1201 GATACTGGCAGATGCGGCCCCTGTTCCAACAGCTGCTGGTGAACCATGCAGAGTGCCAAT  1260
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SEQ. ID NO.124:  1261 ATGTCAGACTCCTCAGGTCACATTGCAGGTTTCGAACAGCAAACCAACAGGTGACAGATG  1320
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mTERT            1267 ATGTCAGACTCCTCAGGTCACATTGCAGGTTTCGAACAGCAAACCAACAGGTGACAGATG  1326

SEQ. ID NO.124:  1321 CCTTGAACACCAGCCCACCGCACCTCATGGATTTGCTCCGCCTGCACAGCAGTCCCTGGC  1380
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mTERT            1327 CCTTGAACACCAGCCCACCGCACCTCATGGATTTGCTCCGCCTGCACAGCAGTCCCTGGC  1386

SEQ. ID NO.124:  1381 AGGTATATGGTTTTCTTCGGGCCTGTCTCTGCAAGGTGGTGTCTGCTAGTCTCTGGGGTA  1440
                      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
mTERT            1387 AGGTATATGGTTTTCTTCGGGCCTGTCTCTGCAAGGTGGTGTCTGCTAGTCTCTGGGGTA  1446

SEQ. ID NO.124:  1441 CCAGGCACAATGAGCGCCGCTTCTTTAAGAACTTAAAGAAGTTCATCTCGTTGGGGAAAT  1500
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SEQ. ID NO.124:  1501 ACGGCAAGCTATCACTGCAGGAACTGATGTGGAAGATGAAAGTAGAGGATTGCCACTGGC  1560
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SEQ. ID NO.124:  1561 TCCGCAGCAGCCCCGGGGAAGGACCGTGTCCCCGCTGCAGAGCACCGTCTGAGGGAGAGGA  1620
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SEQ. ID NO.124:  1621 TCCTGGCTACGTTCCTGTTCTGGCTGATGGACACATACGTGGTACAGCTGCTTAGGTCAT  1680
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mTERT            1627 TCCTGGCTACGTTCCTGTTCTGGCTGATGGACACATACGTGGTACAGCTGCTTAGGTCAT  1686

SEQ. ID NO.124:  1681 TCTTTTACATCACAGAGAGCACATTCCAGAAGAACAGGCTCTTCTTCTACCGTAAGAGTG  1740
                      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
mTERT            1687 TCTTTTACATCACAGAGAGCACATTCCAGAAGAACAGGCTCTTCTTCTACCGTAAGAGTG  1746

SEQ. ID NO.124:  1741 TGTGGAGCAAGCTGCAGAGCATTGGAGTCAGGCAACACCTTGAGAGAGTGCGGCTACGGG  1800
                      ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
mTERT            1747 TGTGGAGCAAGCTGCAGAGCATTGGAGTCAGGCAACACCTTGAGAGAGTGCGGCTACGGG  1806
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SEQ. ID NO.124:   1801  AGCTGTCACAAGAGGAGGTCAGGCATCACCAGGACACCTGGCTAGCCATGCCCATCTGCA  1860
                        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
mTERT             1807  AGCTGTCACAAGAGGAGGTCAGGCATCACCAGGACACCTGGCTAGCCATGCCCATCTGCA  1866

SEQ. ID NO.124:   1861  GACTGCGCTTCATCCCCAAGCCCAACGGCCTGCGGCCCATTGTGAACATGAGTTATAGCA  1920
                        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
mTERT             1867  GACTGCGCTTCATCCCCAAGCCCAACGGCCTGCGGCCCATTGTGAACATGAGTTATAGCA  1926

SEQ. ID NO.124:   1921  TGGGTACCAGAGCTTTGGGCAGAAGGAAGCAGGCCCAGCATTTCACCCAGCGTCTCAAGA  1980
                        ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
mTERT             1927  TGGGTACCAGAGCTTTGGGCAGAAGGAAGCAGGCCCAGCATTTCACCCAGCGTCTCAAGA  1986

SEQ. ID NO.124:   1981  CTCTCTTCAGCATGCTCAACTATGAGC  2007
                        ||||||||||||||||||||||||||
mTERT             1987  CTCTCTTCAGCATGCTCAACTATGAGC  2013
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Translated BLAST comparison of encoded protein

BLASTX algorithm, NCBI website

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SEQ. ID NO.124:   33    MTRAPRCPAVRSLLRSRYREVWPLATFVRRLGPEGRRLVQPGDPKIYRTLVAQCLVCMHW  212
                        MTRAPRCPAVRSLLRSRYREVWPLATFVRRLGPEGRRLVQPGDPKIYRTLVAQCLVCMHW
mTRT:             1     MTRAPRCPAVRSLLRSRYREVWPLATFVRRLGPEGRRLVQPGDPKIYRTLVAQCLVCMHW   60

SEQ. ID NO.124:   213   GSQPPPADLSFHQVSSLKELVARVVQRLCERNERNVLAFGFELLNEARGGPPMAFTSSVR  392
                        GSQPPPADLSFHQVSSLKELVARVVQRLCERNERNVLAFGFELLNEARGGPPMAFTSSVR
mTRT:             61    GSQPPPADLSFHQVSSLKELVARVVQRLCERNERNVLAFGFELLNEARGGPPMAFTSSVR  120

SEQ. ID NO.124:   393   SYLPNTVIETLRVSGAWMLLLSRVGDDLLVYLLAHCALYLLVPPSCAYQVCGSPLYQICA  572
                        SYLPNTVIETLRVSGAWMLLLSRVGDDLLVYLLAHCALYLLVPPSCAYQVCGSPLYQICA
mTRT:             121   SYLPNTVIETLRVSGAWMLLLSRVGDDLLVYLLAHCALYLLVPPSCAYQVCGSPLYQICA  180

SEQ. ID NO.124:   573   TTDIWPSVSASYRPTRPVGRNFTNLRFLQQIKSSSRQEAPKPLALPSRGTKRHLSLTSTS  752
                        TTDIWPSVSASYRPTRPVGRNFTNLRFLQQIKSSSRQEAPKPLALPSRGTKRHLSLTSTS
mTRT:             181   TTDIWPSVSASYRPTRPVGRNFTNLRFLQQIKSSSRQEAPKPLALPSRGTKRHLSLTSTS  240

SEQ. ID NO.124:   753   VPSAKKARCYPVPRVEEGPHRQVLPTPSGKSWVPSPARSPEVPTAEKDLSSKGKVSDLSL  932
                        VPSAKKARCYPVPRVEEGPHRQVLPTPSGKSWVPSPARSPEVPTAEKDLSSKGKVSDLSL
mTRT:             241   VPSAKKARCYPVPRVEEGPHRQVLPTPSGKSWVPSPARSPEVPTAEKDLSSKGKVSDLSL  300

SEQ. ID NO.124:   933   SGSVCCKHKPSSTSLLSPPRQNAFQLRPFIETRHFLYSRGDGQERLNPSFLLSNLQPNLT  1112
                        SGSVCCKHKPSSTSLLSPPRQNAFQLRPFIETRHFLYSRGDGQERLNPSFLLSNLQPNLT
mTRT:             301   SGSVCCKHKPSSTSLLSPPRQNAFQLRPFIETRHFLYSRGDGQERLNPSFLLSNLQPNLT  360

SEQ. ID NO.124:   1113  GARRLVEIIFLGSRPRTSGPLCRTHRLSRRYWQMRPLFQQLLVNHAECQYVRLLRSHCRF  1292
                        GARRLVEIIFLGSRPRTSGPLCRTHRLSRRYWQMRPLFQQLLVNHAECQYVRLLRSHCRF
mTRT:             361   GARRLVEIIFLGSRPRTSGPLCRTHRLSRRYWQMRPLFQQLLVNHAECQYVRLLRSHCRF  420

SEQ. ID NO.124:   1293  RTANQQVTDALNTSPPHLMDLLRLHSSPWQVYGFLRACLCKVVSASLWGTRHNERRFFKN  1472
                        RTANQQVTDALNTSPPHLMDLLRLHSSPWQVYGFLRACLCKVVSASLWGTRHNERRFFKN
mTRT:             421   RTANQQVTDALNTSPPHLMDLLRLHSSPWQVYGFLRACLCKVVSASLWGTRHNERRFFKN  480

SEQ. ID NO.124:   1473  LKKFISLGKYGKLSLQELMWKMKVEDCHWLRSSPGKDRVPAAEHRLRERILATFLFWLMD  1652
                        LKKFISLGKYGKLSLQELMWKMKVEDCHWLRSSPGKDRVPAAEHRLRERILATFLFWLMD
mTRT:             481   LKKFISLGKYGKLSLQELMWKMKVEDCHWLRSSPGKDRVPAAEHRLRERILATFLFWLMD  540

SEQ. ID NO.124:   1653  TYVVQLLRSFFYITESTFQKNRLFFYRKSVWSKLQSIGVRQHLERVRLRELSQEEVRHHQ  1832
                        TYVVQLLRSFFYITESTFQKNRLFFYRKSVWSKLQSIGVRQHLERVRLRELSQEEVRHHQ
mTRT:             541   TYVVQLLRSFFYITESTFQKNRLFFYRKSVWSKLQSIGVRQHLERVRLRELSQEEVRHHQ  600

SEQ. ID NO.124:   1833  DTWLAMPICRLRFIPKPNGLRPIVNMSYSMGTRALGRRKQAQHFTQRLKTLFSMLNYE  2006
                        DTWLAMPICRLRFIPKPNGLRPIVNMSYSMGTRALGRRKQAQHFTQRLKTLFSMLNYE
mTRT:             601   DTWLAMPICRLRFIPKPNGLRPIVNMSYSMGTRALGRRKQAQHFTQRLKTLFSMLNYE  658
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